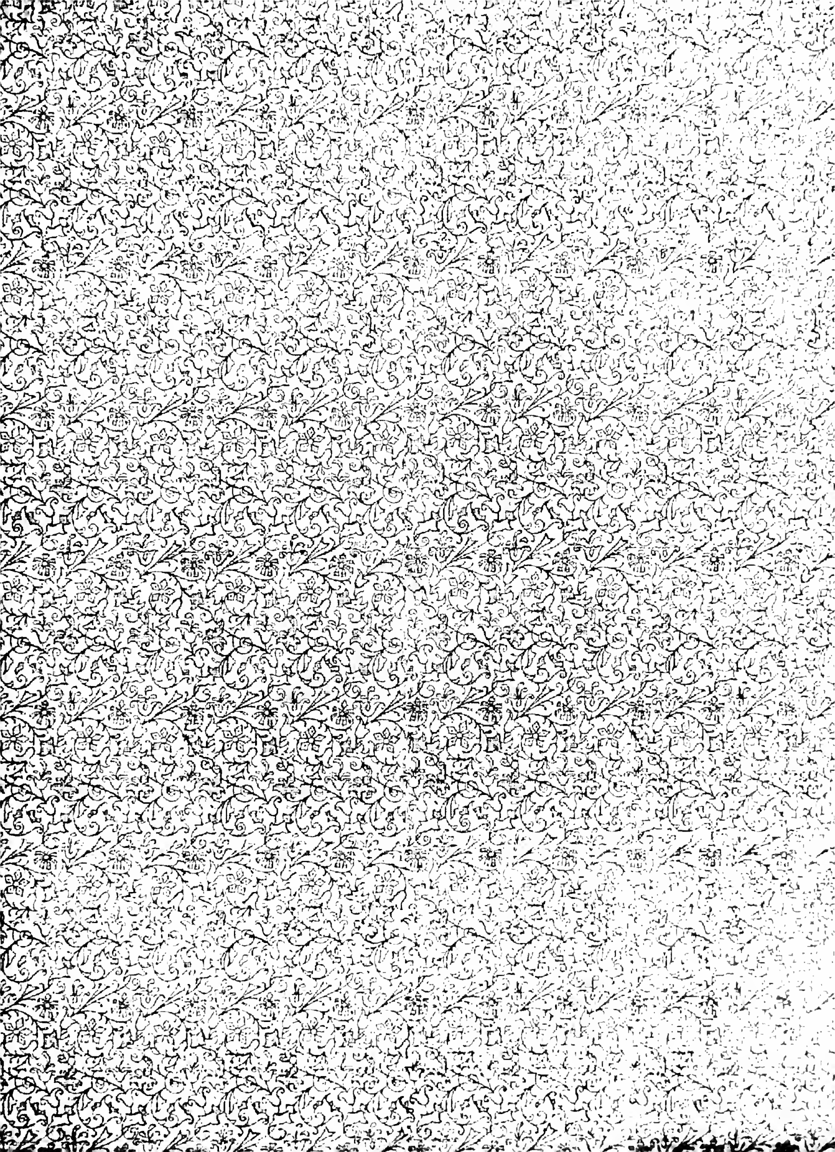
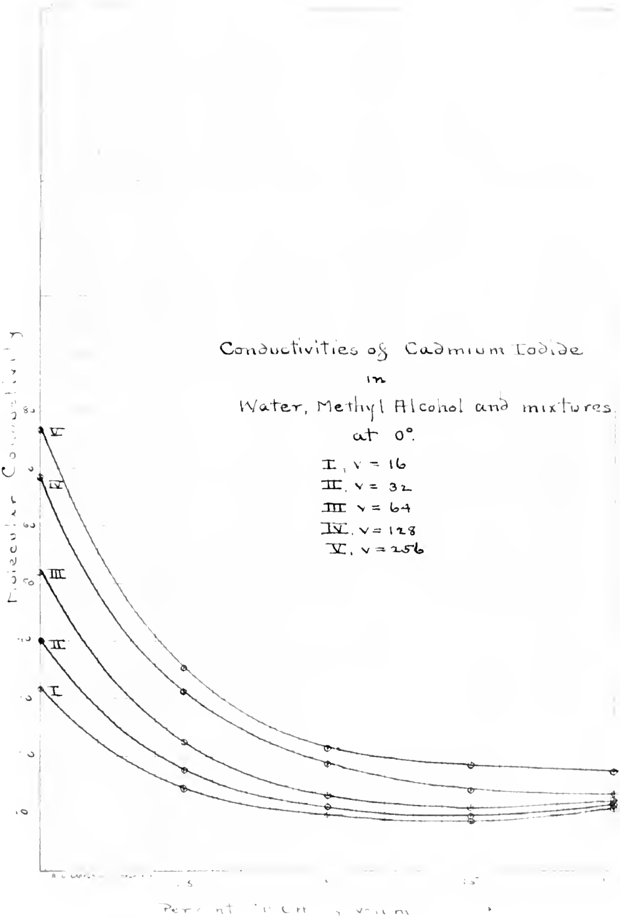




Conductivities of Cadmium Iodide
in
Water, Methyl Alcohol and mixtures
at 0°.
I, v = 16
II, v = 32
III v = 64
IV, v = 128
V, v = 256

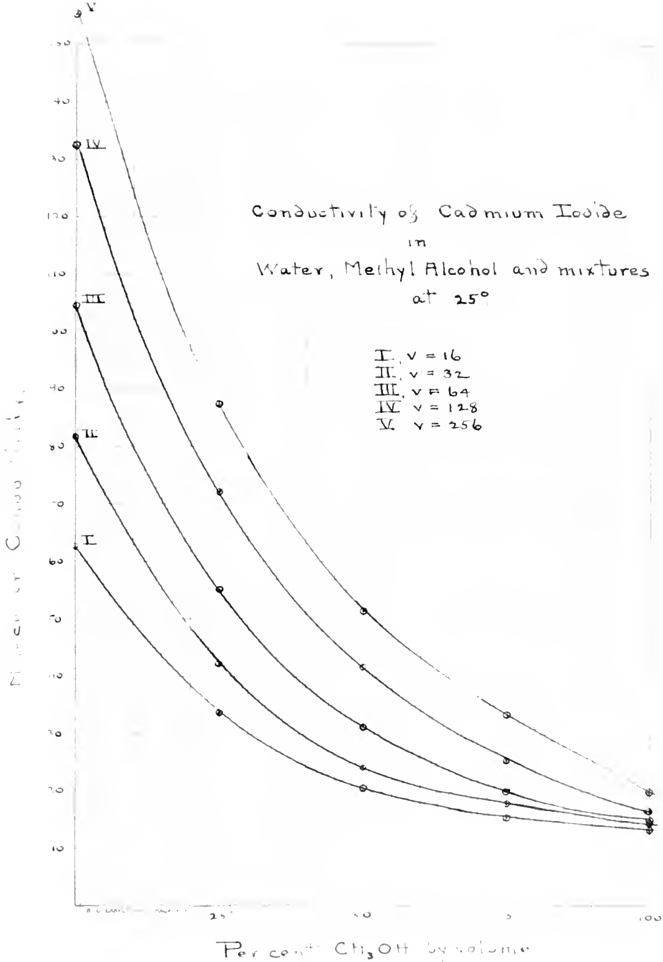
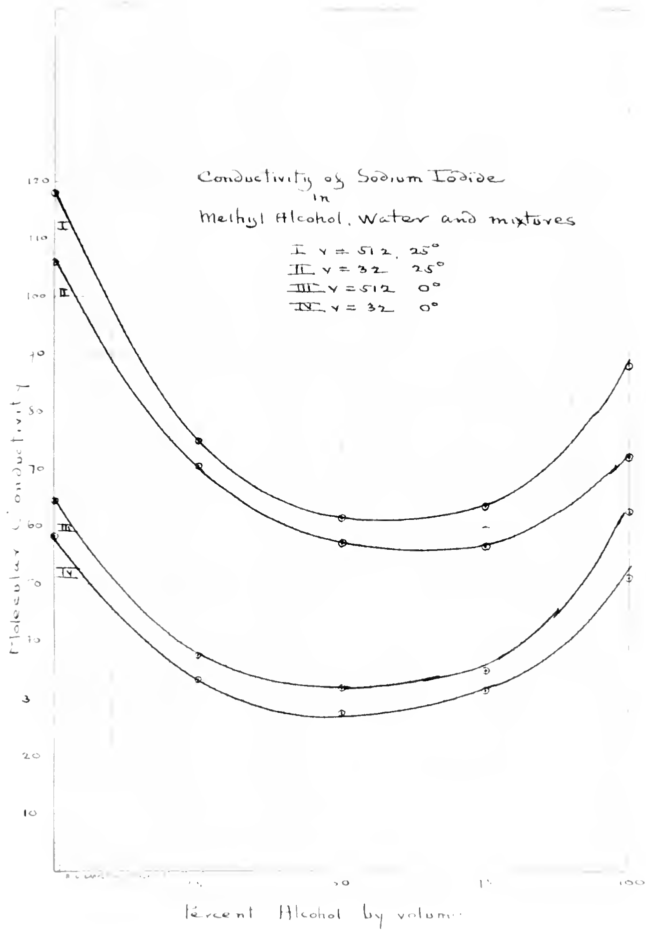

Conductivity of Cadmium Iodide
in
Water, Methyl Alcohol and mixtures
at 25°
I. v = 16
II. v = 32
III. v = 64
IV. v = 128
V. v = 256
I
II
III
IV
V
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
25
50
75
100
Per cent CH₃OH by volume

Fig. [illegible]



Conductivity of Sodium Iodide in Methyl Alcohol, Water and mixtures
I v = 512, 25°
II v = 32 25°
III v = 512 0°
IV v = 32 0°
Molecular Conductivity
Percent Alcohol by volume

Fig. III

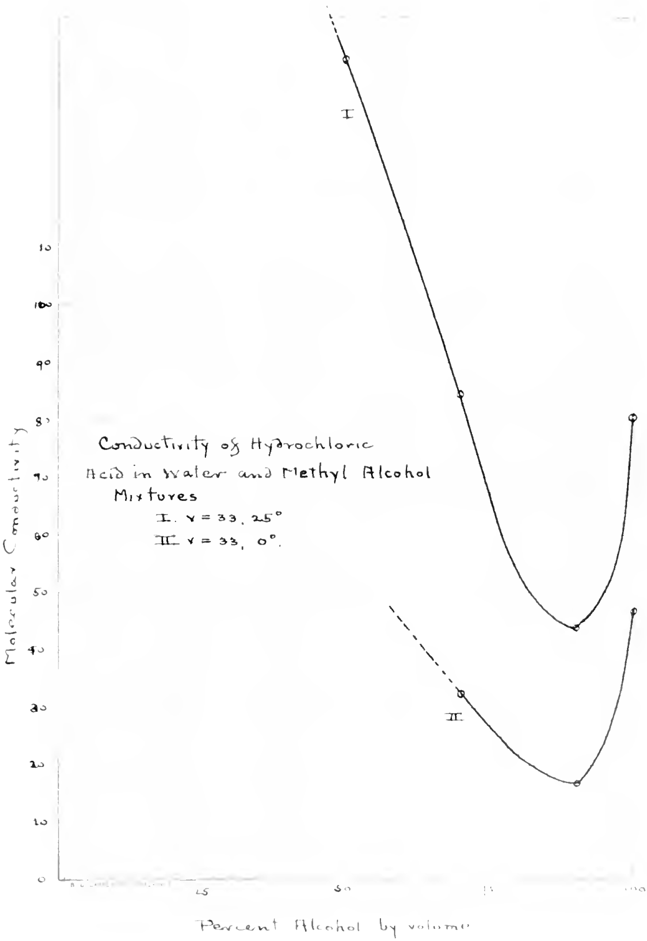
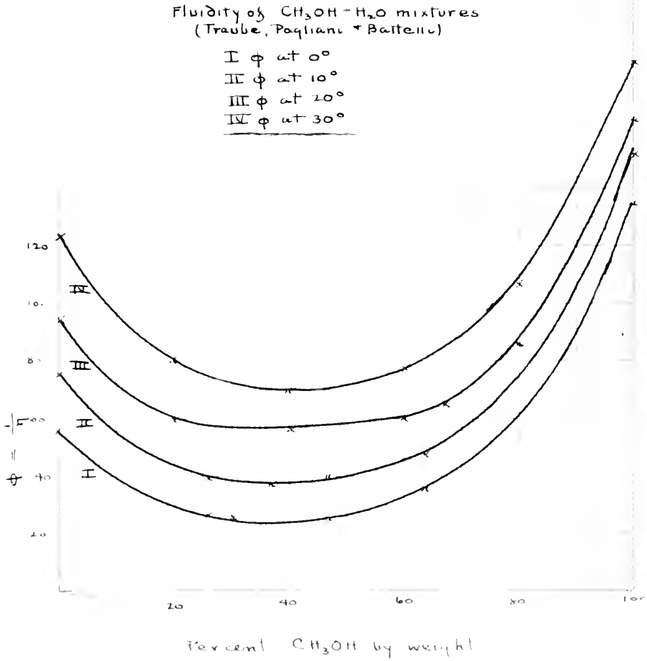

Conductivity of Hydrochloric
Acid in Water and Methyl Alcohol
Mixtures
I. v = 33, 25°
II. v = 33, 0°
Molecular Conductivity
Percent Alcohol by volume
I
II
100
90
80
70
60
50
40
30
20
10
0
25
50

Fig IV

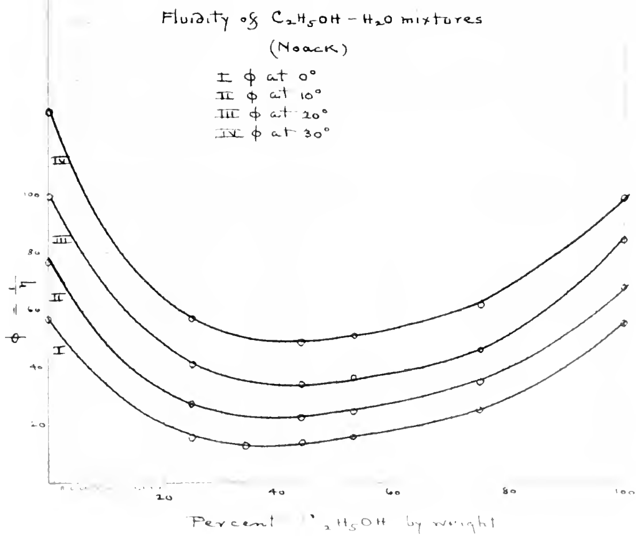
α

α-



Fluidity of $CH_3OH - H_2O$ mixtures
(Traube, Pagliani + Battelli)
I φ at 0°
II φ at 10°
III φ at 20°
IV φ at 30°
120
100
80
60
40
20
IV
III
II
I
20
40
60
80
100
Percent CH_3OH by weight

Fig 81



Fluidity of $C_2H_5OH - H_2O$ mixtures
(Noack)
I φ at 0°
II φ at 10°
III φ at 20°
IV φ at 30°
IV
III
II
I
100
80
60
40
20
20
40
60
80
100
$\phi = \frac{1}{\eta}$
Percent C_2H_5OH by weight

Fig VI

$\Delta \mu$

$\Delta\phi$

$$\frac{\Delta\phi - \Delta\mu}{\Delta\phi}$$

$$\frac{\Delta\Phi - \Delta\mu}{\Delta\mu}$$

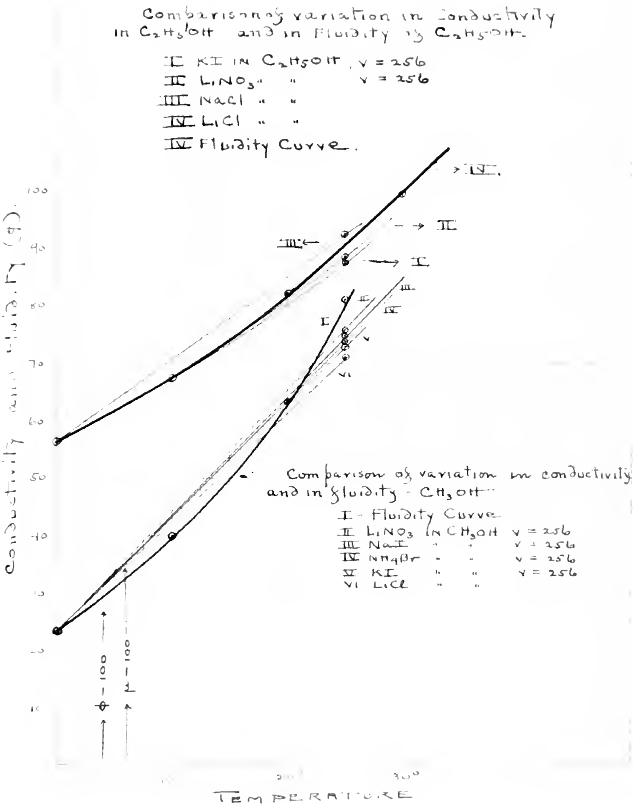
$$\phi = \frac{1}{\eta}$$

$$l = l_o$$

μ_∞

μ_∞

$\mu\eta$ $\mu\eta_{c}$


Comparison of variation in conductivity in C_2H_5OH and in Fluidity of C_2H_5OH.
I KI in C_2H_5OH, v = 256
II $LiNO_3$ " " v = 256
III NaCl " "
IV LiCl " "
IV Fluidity Curve.
Comparison of variation in conductivity and in fluidity - CH_3OH
I - Fluidity Curve
II $LiNO_3$ in CH_3OH v = 256
III NaI " " v = 256
IV NH_4Br " " v = 256
V KI " " v = 256
VI LiCl " "
Conductivity and Fluidity (φ)
100
90
80
70
60
50
40
300
TEMPERATURE